



CLAIMS

Wherein is claimed is:

1. A biocompatible lamina 10, comprising denatured serum albumin in a solid state having sufficient water content to be pliable, formed into a film having a thickness 12 in a range of 75 μ m to 300 μ m.
2. The biocompatible lamina of claim 1, wherein the serum albumin has a concentration of 50% to 57% w/v.
- 10 2a. The biocompatible lamina of claim 1, wherein the lamina has a thickness 12 of about 250 μ m.
3. The biocompatible lamina of claim 1, having a tensile strength of at least about 625 kPa.
- 15 4. The biocompatible lamina of claim 1, having an elasticity of about 1700 kPa to 4000 kPa.
5. The biocompatible lamina of claim 1, further comprising a chromophore.
- 20 6. The biocompatible lamina of claim 1, further comprising at least one biologically active agent.
- 25 7. A method of manufacturing a denatured albumin lamina 10, comprising:
providing two nonporous sheets 54 arranged in substantially parallel apposition so as to define a space 60 of substantially uniform thickness between the nonporous sheets;
- 30 flowably interleaving a serum albumin solution 52 in the space between the nonporous sheets;

enclosing the interleaved serum albumin solution and nonporous sheets in a container 61;
evacuating the container; and
heating the container sufficiently to convert the serum albumin solution
5 between the nonporous sheets into a solid albumin film.

8. The method of claim 7, wherein the nonporous sheets are apposed a spacing of not less than about 75 μ m.

10 9. The method of claim 7, wherein the serum albumin solution has a concentration of about 50% to 58%.

10. . The method of claim 7, wherein the serum albumin solution further includes a chromophore.

15 11. The method of claim 7, wherein the serum albumin solution further includes at least one biologically active agent.

12. The method of claim 7, wherein heating the container involves
20 exposing the container to a temperature greater than about 86° C.

13. The method of claim 7, wherein the container is heated for at least about one minute.

25 14. A method of repairing a lesion on a solid visceral organ, comprising:
applying an energy-absorbing material to a lesion site on the solid visceral organ lesion;

irradiating the proteinaceous fluid with energy sufficient to fuse the energy-absorbing material at least partially to the surface at the lesion site;

30 applying a biocompatible denatured albumin lamina onto the energy-absorbing material on the lesion site; and

irradiating the biocompatible albumin lamina and the proteinaceous fluid with energy sufficient to fuse the biocompatible albumin lamina to the surface at the lesion site.

5 15. The method of claim 14, wherein the layer is irradiated sufficiently to achieve substantial hemostasis at the lesion site.

10 16. The method of claim 14, wherein the biocompatible albumin lamina has an albumin concentration of about 50% to 58%.

15 17. The method of claim 14, further comprising the step of clamping off blood supply to the lesion site of the solid visceral organ.

18. The method of claim 14, wherein the energy-absorbing material is a fluid and is applied to a thickness of 100–1000 μm .

18a. The method of claim 18, wherein the energy-absorbing material is a fluid and is applied to a thickness of 100–250um.

20 19. The method of claim 14, wherein the energy-absorbing material comprises a chromophore and the energy is light energy of a wavelength absorbed by the chromophore to fuse the biocompatible albumin lamina to the lesion site.

25 20. The method of claim 19, wherein the biocompatible albumin lamina is translucent to light energy.